

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Sukhendu K. Majumdar

GENERAL INFORMATION:

Name:	MarkWest Hydrocarbon, Inc.
Address:	PO Box 575, Route 23 South Shore, KY 41175
Date application received:	7/2/2007
SIC Code/SIC description:	1321, Natural Gas Processing
Source ID:	21-089-00005
Agency Interest:	1600
Activity:	APE20070001
Permit:	F-05-011 R1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
X Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	2006 Actual (tpy)	Potential (tpy)
PM/PM ₁₀	1.09/1.09	2.9/2.9
SO ₂	0.085	0.3
NO _x	14.55	38.6
CO	12.05	31.85
VOC	25.9	66.4
Single HAPs	None	<10
Source wide HAPs	None	<25

SOURCE DESCRIPTION:

MarkWest Hydrocarbon, LLC owns and operates an onshore natural gas processing plant located in South Shore, Kentucky referred to as the Siloam facility. This facility receives natural gas liquids from pipeline and from trucks and then physically separates the natural gas liquids into its pure components, such as propane, butane and other products.

MarkWest Hydrocarbon, LLC at Siloam facility has applied for a minor modification to the present operating permit F-05-011 to the Division on July 2, 2007. The modification application includes the addition of two (2) diesel powered fire water pumps, addition of truck unloading facility to unload Natural Gas Liquid (NGL) at a low pressure and a correction to the permit language regarding venting of propane during propane loading in trucks and railcars.

The Siloam facility is classified as an onshore natural gas processing plant that uses fractionation to produce a variety of products from natural gas liquids (NGL). The equipment at this facility, which also has the potential to generate emissions of regulated air contaminants, is capable of producing propane, normal butane, iso-butane, high-purity butanes and natural gasoline. Operations at the facility include NGL fractionation equipment, above/under ground storage and process tanks, truck loading/unloading operations, railcar loading operations and river barge loading operations. The facility is also equipped with two small industrial boilers (each less than 250 mmBtu/hr).

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

VOC and HAP Conditional Major Limitation:

MarkWest Hydrocarbon, LLC has requested voluntary permit emission limits of 9 tons per year (tpy) or less of a single Hazardous Air Pollutant (HAP), 22.5 tpy or less of combined HAPs, and 90 tpy or less of Volatile Organic Compounds (VOC). Compliance with the permit limits shall make the requirements of 401 KAR 52:020, Title V permits, not applicable to this source. Compliance with the VOC limit shall also make this source a synthetic minor source pursuant to 401 KAR 51:017, Prevention of Significant Deterioration (PSD) of air quality.

OPERATIONAL FLEXIBILITY:

None